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## **Inflammatory Pseudotumor of Spleen: A Case Report**

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Abstract Case Report

Inflammatory pseudotumors are benign tumors, rare, occurs preferentially in young adults with predominance in women, which can affect any organ; we describe the case of a patient with a spleen location.

**Keywords:** Spleen, pseudotumor, inflammatory, bengin, splenectomy.

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## Introduction

Inflammatory pseudotumors are benign lesions, rare, of debated etiopathogenesis, all organs can be affected; lungs, mesentery, pancreas, soft tissues, in the form of a firm and painless solitary mass [1, 2]. It mainly affects young adult and is characterized histologically by a proliferation of myofibrblast cells, intimately mixed with inflammatory cells [3]. The splenic localization remains exceptional; only approximately 115 cases have been reported in the literature since the first two cases were reported in 1984 by Contelingam and Jaffe [1]. Preoperative diagnosis remains diffult despite radiological advances; we report an observation of inflammatory pseudotumour of the spleen.

#### PATIENT AND OBSERVATION

An 48 years old patient, without known diseases, who presents pain in the left hypochonduim, the clinical examination only revealed a slight sensitivity of the left hypochondrium, an abdominal was ultrasound performed showing heterogeneous splenic mass. we completed with abdominal scanner which objectified a superior polar splenic tissue process, well limited, with lobulated contours, heterogeneously enhanced after contrast, delimiting a zone of central necrosis, measuring 87x73 x 73mm, coming into contact with neighboring organs without signs of invasion (Figure 1 & 2), givin this radiological characteristics, angiosarcoma was highly probable, hence the collegial decision to perform a scanno-guided biopsy which returned in favor of reaction-like myofibroblastic proliferation.

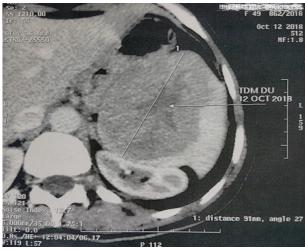


Fig-1: Axial section showing the heterogeneous mass of spleen

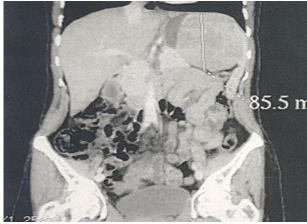


Fig-2: Frontal cut showing the mass of spleen

The diagnosis of an inflammatory pseudotumor of spleen was retained, and the decision was made to do splenectomy by left subcostal incision given the size of tumor and its relationship to neighboring organs. To surgical exploration; presence of a mass at the expense of the upper pole of the spleen of about 10cm long axis, adherent to stomach and to the tail of the pancreas without invasion, the procedure consisted performing a splenectomy by removing the masse after ligature section of the splenic artery and vein.



Fig-3: Mass at the expense of spleen



Fig-4: Operating part (spleen+mass)

#### **DISCUSSION**

Inflammatory pseudotumor of spleen are exceptional with only a hundred cases reported in literature, occurs preferentially in young subjects with the mean age of onset of 51,5 years (16-87 years), predominantly female 60% [1, 2]. Of controversial

etiology, the spleen's non-specific inflammatory response to various attacks: infectious, traumatic foreign body, vasculitis, iodiopathic.... [4]. Half of the reported cases are discovered incidentally during an examination for another condition, the clinical signs and symptoms are nonspecific with, in decreasing order of frenquency, pain (47%), fever (15%), weight loss, clinical examination found splenomegaly in 80 % of cases of reported cases [1, 2]. Which was not found in our case. The inflammatory pseudotumor usually presents on radiology as a single, well-circumscribed nodule ranging in size from 4 to 19 cm, but mltinodular lesions have been reported, necrotic, hemorrhagic, fibrous or cystic foci have been described [6, 7]. The differential diagnoses by radiology are mainly made with lymphoma, angiosarcoma, hemangioma, hamartoma, metastases, sarcomas. And it is the histological study of the spleen after splenectomy or biopsy that allows the final diagnosis [2]. On histological examination, the inflammatory pseudotumor is well limited and develops into the red pulp encompassing patches of white pulp. Cotelingam describe three histologicalsaspects: hypervascularized myxoid foci, compact foci of spindle cells simulating the cellular areas of fasciitis or fibromatosis and finally large areas of collegenized hypocellular fibrosis these three aspects are generally found within the same tumor. The immunohistochemical study essentially eliminates lymphoma [3, 5].

The treatment of inflammatory pseudotumor of spleen is surgical with splenectomy in the majority of cases, partial splenectomy may indicated in the event of a single well-defined tumor without capsular invasion or invasion of neighboring organs or locoregional lymphadenopathy[8].

#### CONCLUSION

Inflammatory pseudotumor of spleen is bengin, rare lesion of unknown cause [1, 2]. Itis difficult oobtain a definite diagnosis without resection or biopsy. Treatment is surgical and prognosis is favorable [8]. We reported a case in which the postoperative consequences were simple and the course after one year did not reveal any recurrence or other late complications.

#### **Conflict of interest:** None

## RÉFÉRENCE

- 1. Ma ZH, Tian XF, Ma J, Zhao YF. Inflammatory pseudotumor of the spleen: A case report and review of published cases. Oncology Letters. 2013;5(6):1955-7.
- Yarmohammadi H, Nakamoto D, Faulhaber PF, Miedler J, Azar N. Inflammatory pseudotu-mor of the spleen: review of clinical presentation and diagnostic methods. J Radiol Case Rep. 2011;5:16-22.

- 3. Cotelingam JD, Jaffe ES. Inflammatory pseudotumor of the spleen. Am J Surg Pathol, 1984;8:308-75.
- 4. Hrora A, Raiss M, Mahassin. Pseudo-tumeur inflammatoire de la rate annal de chirurgie. 2000;125:585-16.
- Sellami-Dhouib R, Mrad K, Sassi S, Driss M, Abbes I, Mounir H, Noureddine L, Ammar B, Romdhane KB. Pseudotumeur inflammatoire de la rate: à propos de deux observations. InAnnales de Pathologie 2007 Jun 1 (Vol. 27, No. 3, pp. 247-250). Elsevier Masson.
- Ugalde P, García Bernardo C, Granero P, Miyar A, González C, González-Pinto I, Barneo L, Vazquez L. Inflammatory pseudotumor of spl-een: a case report. Int J Surg Case Rep. 2015; 7C: 145-148.
- Hamdi I, Marzoul I. Pseudo-tumeur inflammatoire de la rate corrélation anatomo-clinique. J Radiol. 2006;87:1894-6.
- 8. Ma ZH, Tian XF, Ma J and Zhao YF. Inflammatory pseudotumor of the spleen: a case report and review of published cases. Oncol Lett. 2013; 5:1955-1957.